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WIRE STRIKE REPORT

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WIRE STRIKE MISHAP ANALYSIS REPORT

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Report No. 71-2

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PREFACE

The purpose of this report is to identify those factors and circumstances which cause or contribute to the continuing occurrence of wire strikes by Army aircraft. Identification and analysis of these cause factors is the first step required in the elimination of wire strikes as a significant hazard to Army aviation. It is essential to determine which of the cause factors are related to the mission of Army aviation and to train aviation personnel to effectively cope with these factors. Equally important is the elimination, through command emphasis and supervision, of those factors or practices which are not essential to the mission.

The report revealed that a high percentage of wire strike mishaps have occurred as a result of low level operations which were not required by the mission or dictated by weather conditions. In addition, the violation of regulations and/or unit SOP's concerning low level flight and the conduct of training in unfamiliar areas were major causes of wire strikes. These are the types of factors and causes, nonessential to missions, which contribute to wire strikes and which must be eliminated through command action.

In the present area of combat operations, a majority of the wire strikes have occurred during administrative type missions in relatively secure areas. This points once more to the pressing need for command action to eliminate cause factors not essential to missions. Wire strikes have not been a major problem during conduct of low level combat missions in southeast Asia. This can be attributed to the near total absence of wires in the combat area, rather than to an ability to cope with them. In fact, the tremendous number of tree strikes which have occurred during combat missions indicates a very low level of proficiency in wire and obstacle avoidance. Low level (nap-of-the-earth) flight in mid and high intensity warfare will be a necessity for survival. A greater awareness of the hazards associated with low level flight must be created if an acceptable level of survivability is to be achieved. In areas such as western Europe, wires will be a definite hazard to nap-of-the-earth flight and the ability to operate effectively within this environment must be developed.

Attempts to provide the aviator with a reliable means of detecting and/or coping with wires have been and are continuing to be made. Wirecutting devices and radar and laser detector systems are being studied. However, these have not yet proven an effective answer to wire strike losses. At present, the best means of coping with wires during low level operations remains the detection and avoidance of the wires by well-trained aviators. To develop well-trained aviators, the training cannot be lumped together with so-called proficiency flying where the individual aviator goes out and flies around at low level. This training must be organized and conducted at unit level and must include instructions in analyzing the mission, the enemy threat, and the operational environment. The aviator must be able to evaluate these factors and determine the best solution. He must be trained in how to best detect wires. He should know the relationship between aircraft speed and wire detection and avoidance. Since most wire strikes occur at cruise or high speed, consideration should be given to the need for slow flight in unreconned areas of Europe and CONUS. There are fewer wires in less inhabited countrysides. These conditions could lead to overconfidence and result in careless operations.

The overall probability of the crew and passengers becoming fatalities in wire strike mishaps is approximately 25%, with a 50% probability of receiving some degree of injury. However, in those mishaps involving high voltage transmission wires, the probability of receiving fatal injuries approaches 100%.

This report reveals the magnitude of the problem. It lists 146 wire strikes which resulted in 75 fatalities, 56 injuries, and aircraft damage of approximately $6.6 million. Wire strikes can and must be reduced through command supervision and training of Army aviators.

EUGENE B. CONRAD
Colonel, Infantry
Director

TABLE OF CONTENTS

I. ABSTRACT.....1

II. SUMMARY.....1

III. INTRODUCTION.....1

IV. RECOMMENDATIONS.....2

V. DISCUSSION.....3

REFERENCES.....10

WIRE STRIKE REPORT

I. ABSTRACT. This report contains analyses of all wire strike accidents and incidents involving Army aircraft during the period 1 January 1966 through 30 June 1970 and recommendations based on the analyses. The information in this report is similar in scope to that of a previous USABAAR report, dated April 1966, covering the period 1 July 1957 through 31 December 1965.

II. SUMMARY. Wire strike accidents and incidents which occurred during the period of this report resulted in 75 fatalities, 56 injuries, and an aircraft hardware loss of approximately $6.6 million. A total of 146 wire strike mishaps were reported. Of this total, 63 resulted in major accidents and 90% of the 63 were rotary wing aircraft.

The majority of wire strike mishaps occurred off military reservations during daylight periods of excellent visibility.

Fifty-nine percent of all wire strikes occurred at an altitude of 50 feet AGL or less. Twelve percent occurred between 50 and 100 feet AGL and 11 percent occurred above 100 feet. The altitude at which the remaining 18 percent occurred was not reported.

Approximately 48 percent of all wire strikes occurred while in level flight, either on a tactical exercise or a reconnaissance mission. The remainder occurred during takeoff and landing.

Approximately 31 percent of the mishaps occurred during training exercises, the majority of which involved at least two people in the cockpit.

The majority of CONUS wire strike mishaps involved a violation of Army regulations and unit SOP's regarding altitude restrictions. The fact that these violations have persisted emphasizes the necessity for commanders to evaluate the problem and accept their responsibilities to eliminate these violations.

Thirteen major wire strike accidents in Vietnam occurred in the same location and involved the same powerline.

III. INTRODUCTION. There was no noticeable trend in wire strikes during the 4½ years covered in this report. The wire strike problem is much greater for rotary wing aircraft than fixed wing aircraft. This is primarily due to rotary wing aircraft being flown close to the ground, particularly during nap-of-the-earth flying which is frequently less than 20 feet above the ground.

There were 146 reported encounters with wires during this period. Fourteen different models of fixed wing aircraft accounted for 17 accidents and incidents. The remaining 129 accidents and incidents involved 10 different models of rotary wing aircraft.

Figures, aircraft involved, conditions, etc., are contained in tables throughout the report. Where necessary, information in these tables is explained or expanded in the narrative.

This report was originated to ascertain whether wire strikes occur predominantly under certain conditions and if so, to identify those conditions. In addition, it is intended to assist in the prevention of wire strike mishaps.

The following definitions are extracts from those contained in AR 385-40 and AR 95-5. An accident is defined as damage to one or more Army aircraft which occurs between the time the engine(s) are started for the purpose of commencing flight until the time the aircraft comes to rest with all engines and propellers or rotors stopped and brakes set or wheel chocks in place.

Major accident: An aircraft accident is classified major when the aircraft is destroyed, or damage sustained is equal to or in excess of the man-hour criteria cited in Table 2-1 of AR 385-40; or damage in which a major component is destroyed or damaged beyond economical repair at any level of maintenance.

Minor accident: Damage, which is less than

major damage, but in which the total direct man-hours required to remove, repair, and replace damaged component(s) equal or exceed the man-hours set for that particular type and model of aircraft in Table 2-2 of AR 385-40.

Incident: An incident classification is when the aircraft damage is less than the man-hour criteria for a minor damage classification cited in Table 2-2 of AR 385-40.

Mishap: The term *mishap*, as used in this report, includes the total of all accidents and incidents combined for table and narrative presentation.

Cause factors: Examples of accident cause factors which will be found in this report are:

1. *Operation* (includes crew performance): Failure of the pilot, copilot, or other crewmember to cope successfully with any situation.

2. *Training:* When training deficiencies exist.

3. *Supervision:* Supervision becomes a factor when an accident results from the following cause factors: discipline, lack of pilot qualification (i.e., assignment of a noninstrument-rated aviator to a mission in marginal weather), failure to provide adequate training or time to maintain flying proficiency, failure to establish adequate SOP's, failure to eliminate hazards, and prolonging flying duties beyond the limit of safe physical and mental endurance.

IV. RECOMMENDATIONS. It is not the principal intent of this report to make recommendations for application to operational flying. However, the following points should be considered by operating officials. These recommendations or suggestions, if used at command level and by individual aviators, will reduce or even eliminate the majority of the type wire strikes covered in this report.

1. Strict application and enforcement of altitude restrictions wherever practicable will reduce the number of wire strikes. Altitude restrictions are of primary concern, particularly in locations where training exercises are being conducted. Unless wires are marked or their locations are made known to each individual aviator, an altitude restriction of at least 100 feet should be enforced. An exception to this would be when operational requirements necessitate a lower flight altitude.

2. Approximately 50% of all wire strike mishaps occurred during takeoff or landing. Most of these could have been prevented by adequately marking wires and noting their locations around established airfields and on military reservations. If at all possible, such wires should be placed underground.

3. Only designated areas which have been inspected and found free of wires should be used to conduct low level navigation and contour flight training.

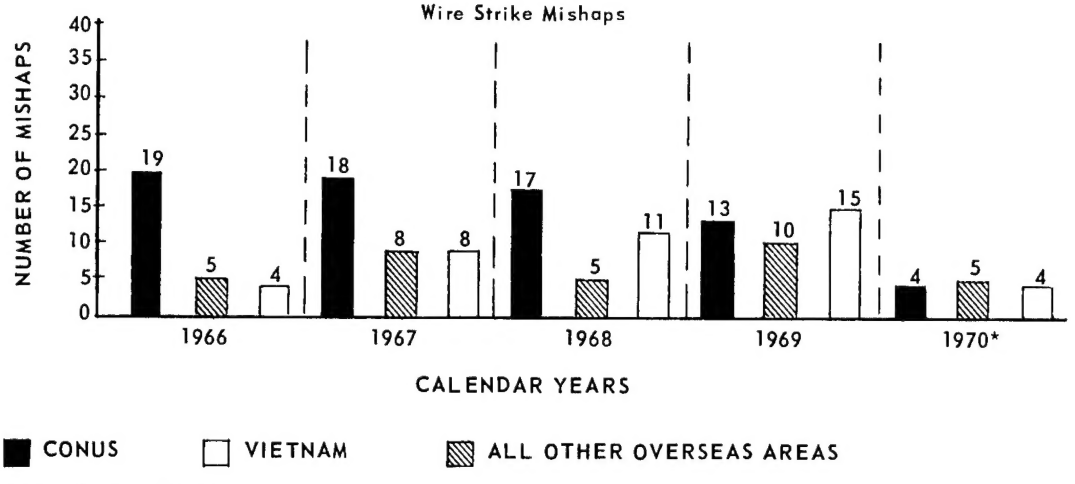
4. If a near miss occurs with a wire, the aviator should report the wire's height and location for proper marking. The presence of wires near airfields/heliports and other frequently used areas should be indicated on maps and committed to memory. The best safeguard, however, is for these wires to be made visible, if possible.

5. As indicated in this report, wires are extremely difficult to see. The best known wire detection device available today is the aviator himself. In most cases, wires can generally be located by looking for poles or pylons on either side of the aircraft's flight path. If low sun, rain, poor visibility, or any other condition reduces the aviator's ability to search for poles and wires during flight, then he should compensate for this condition by flying at a higher altitude.

6. Aviators and commanders alike must evaluate the continuing problem of wire strikes and accept their respective responsibilities in the elimination of wire hazards.

7. As recommended in earlier wire strike reports, a definite need exists for the development of a wirecutting or wire detection device. Several approaches to the problem of detecting and cutting wires have been considered, but none have been adopted to date. It is hoped that aircraft presently in the Army inventory will someday be modified by the installation of a wirecutter or detector and that future design and development programs for new aircraft will include the requirement for such devices.

FIGURE 1
Wire Strike Mishaps



*First half of CY 1970

V. DISCUSSION. Figure 1 shows fixed and rotary wing wire strike mishaps by calendar years and location. The 4½ years of data reveals that in-flight collision with wires remained fairly constant, with an average of approximately 32 wire strike mishaps per year. Forty-nine percent of the total wire strikes occurred in CONUS. Vietnam accounted for approximately 29% and other overseas areas (USAREUR, Pacific, Alaska, etc.) reported the remaining 22%. CONUS showed a slight decrease in wire strike mishaps, from 19 in 1966 to 13 in 1969. Vietnam, however, indicated an increase from four in 1966 to 15 in 1969. It is believed the increase in Vietnam mishaps was primarily due to the increase in the flying hour program beginning in CY 1967, the low level mission requirements dictated in the Vietnam operation, and the aviator himself.

Even though figure 1 seems to indicate a decreasing trend for CONUS and an increasing trend for Vietnam, the average wire strike encounters per calendar year for both rotary and fixed wing aircraft remain fairly constant.

The rate of wire strike mishaps per 100,000 flying hours is shown in table 1. The highest rate for the 4½-year period was in the other overseas areas, with 3.4 wire strikes per 100,000 flying hours. CONUS showed a yearly decrease in wire strike mishap rate from 1.1 in 1966 to 0.5 in 1969.

It is believed the decline in CONUS wire strikes was brought about by several factors--a change in the training program, command emphasis on wire hazards, and a vigorous program initiated in late 1966 to enforce the requirement of identifying and marking wires in and around all airfields and military installations.

The wire strike rate in Vietnam remained fairly constant throughout the 4½ years, with an average rate of 0.4 per 100,000 flying hours. During the first half of calendar year 1970, Vietnam reported four wire strike mishaps in approximately 1.8 million flight hours.

Of the 42 wire strike mishaps in Vietnam, 20 occurred in the III Corps Tactical Zone. Thirteen of these occurred in the Saigon-Bien Hoa-Long Bien complex and involved the same high

TABLE 1

Wire Strike Rates Per 100,000 Flying Hours

	CALENDAR YEARS					
	66	67	68	69	70*	TOTALS
CONUS	1.1	0.9	0.6	0.5	0.3	0.7
VIETNAM	0.3	0.4	0.4	0.4	0.2	0.4
OTHER OVERSEAS AREAS	2.1	4.3	2.6	4.2	3.0	3.4
TOTAL	0.8	0.8	0.6	0.6	0.4	0.6

*First half of CY 1970

tension powerlines. The I Corps had nine wire strike mishaps, with five of these occurring in the Hue-Phu Bai area. The II Corps Tactical Zone followed with eight wire encounters. The remaining five wire strike mishap reports did not identify the wire location. The accompanying photographs and briefs depict two of the 13 accidents which involved the same high tension powerlines in the Saigon-Bien Hoa-Long Bien complex.

A UH-1H, with a crew of four aboard, was on a dawn resupply mission, flying No. 1 in a formation of two. IFR conditions were encountered and the crew of the No. 2 helicopter lost sight of No. 1 and began a descent. They saw the other helicopter intermittently as they descended through broken to overcast clouds, finding it necessary to descend to approximately 100 feet to maintain visual contact with the ground. They saw the No. 1 helicopter strike powerlines approximately 80 feet above the ground, then crash and burn. The four crewmembers were killed. The ceiling at the crash site was between 100 and 150 feet, with one-half to one mile visibility. Prior to their departure for this mission, neither crew checked with any facility for en route weather or weather in their operational areas.

The pilot of an OH-6A was preoccupied by the low level visual recon he was making and failed to see wires stretched between two spans of a river bridge. A wire caught the left skid, ripping it off and sending the helicopter into a left nose low attitude. It hit the water at an estimated 80 knots and sank. The crew of three escaped with one minor injury.

Approximately 88% of all wire strike mishaps during this period involved rotary wing aircraft (table 2). It is apparent the UH-1 led the rotary wing category in wire encounters and the O-1 accounted for the highest number of mishaps in the fixed wing category. The UH-1 was involved in 59 mishaps, of which 26 were classified as major accidents.

Of all the helicopter wire strikes, 81 occurred below 50 feet AGL. Thirty-four wires were hit during takeoff and 17 during landing. Eighteen mishaps occurred during autorotation. It is difficult to believe that wire encounters during simulated autorotations are allowed to occur, particularly during training exercises and in authorized training areas. This definitely reflects a lack of commonsense, education, and knowledge concerning low level flying, plus lack of air or ground reconnaissance of landing

UH-1H struck powerlines approximately 80 feet above the ground in IFR conditions, crashed, and burned. Crew did not check weather prior to departure.

TABLE 2

Mishap Classification By Type Aircraft

TYPE ACFT	MAJ	MIN	INCD	TOTAL
UH-1	26	1	32	59
OH-23	14	1	9	24
TH-55	8		6	14
OH-6	4		9	13
OH-13	4	1	4	9
CH-21			6	6
OH-58	1			1
CH-37			1	1
AH-1G			1	1
CH-47			1	1
TOTAL	57	3	69	129
O-1	4		6	10
U-6	1		2	3
U-1	1		1	2
T-41			2	2
TOTAL	6	0	11	17

sites, and other violations by aviators involved and unit commanders.

Of the 17 fixed wing wire strikes reported, nine occurred during landing, six during contour flying, and two during takeoff operations. A significant fact discovered during this study was that 35 percent of all fixed wing wire strikes happened on or near authorized landing facilities.

Table 3 shows that wire strike mishaps do not reflect a significant trend during the period covered in this report.

An example of unnecessary low level flying and violation of local SOP's is best illustrated in the following two accident case histories:

A UH-1 was on division courier with several pickups and dropoffs during the flight. The helicopter departed the last pickup en route back to base camp. Approximately 15 minutes later, witnesses stated it struck two strands of one-half inch powerlines 70 feet AGL and fell into a river. The UH-1 was a total loss, resulting in 10 fatalities and one major injury. The accident investigation report stated that the aircraft commander had a tendency to fly low level over areas where other pilots maintained a high altitude. The flight surgeon commented that other pilots who had flown with the aircraft commander said that at times he was nonchalant about flying and exceptionally fond of low level flying, occasionally doing so in areas where aviators were advised to remain at a safe altitude. The cause of this accident was listed as operational error, in that the aircraft commander violated a local SOP that required a minimum altitude of 400 feet in the area of the accident. A probable or suspected cause factor was that the aircraft commander demonstrated poor judgment in flying low level over a populated area.

It was recommended that command emphasis be placed on aircraft commanders and aviators who deviate from normal flight procedures unless the tactical situation warrants.

An OH-58 was leading another aircraft on an insertion training mission. The scout OH-58 led the way along a predetermined route, flying

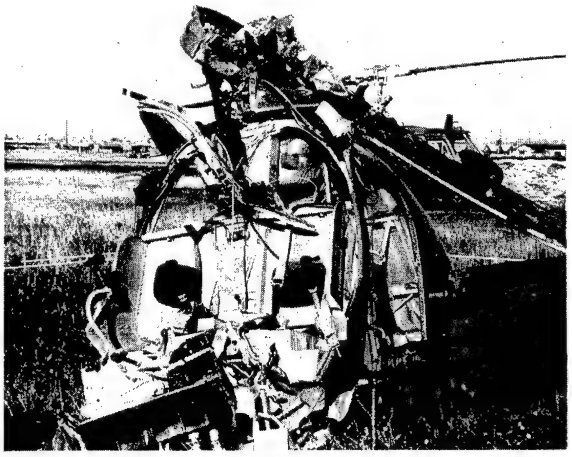
TABLE 3

Mishap Classification By Calendar Years

ACCIDENT CLASSIFICATION	AIRCRAFT CATEGORY	1966	1967	1968	1969	1970*	TOTALS	TOTAL ALL A/C
MAJORS	F/W	3	2		1		6	63
	R/W	9	12	13	15	8	57	
MINORS	F/W							3
	R/W	1	2				3	
INCIDENTS	F/W	2	1	4	3	1	11	80
	R/W	13	17	16	19	4	69	
YEARLY TOTALS		28	34	33	38	13	146	

*First half of CY 1970

close to the ground. It entered a small valley in which three strands of 1-inch wire cable were strung from power poles on both sides of the valley. The aircraft was flying approximately 30 to 40 feet above the ground with the troop-carrying ship to the left rear and above the lead ship. The pilot of the troop-carrying ship advised the scout ship that the valley contained wires. The pilot of the OH-58 acknowledged and was seen to increase his altitude for a short while and then return to his previous low altitude. After about 1 minute, the troop-carrying ship again advised the OH-58 pilot that there were wires 30 feet to his front. The OH-58 came up momentarily, descended again, and then appeared to climb just prior to hitting the wires. It contacted the wires at 42 feet AGL. Breaking through the wires, the pilot made a left pedal turn approximately 200 degrees and the OH-58 continued to the ground in an apparent controlled attitude. Upon impact with the ground, it exploded into flames and came to rest on its left side. There were two fatalities. The cause of the accident was attributed to the aviator flying at an unnecessary low altitude and high airspeed for mission accomplishment and failure to respond to a warning of imminent wire dangers.



Wire caught left skid of OH-6A during low level recon of river. Helicopter crashed in water and sank.

A probable or suspected cause was listed as improper supervision within the unit of flight planning procedures, disregard of basic safety regulations, and false impression on the part of the pilot that the powerlines ran parallel to the intended route of flight.

It was recommended that:

1. Proper flight safety rules be established and strictly adhered to prior to initiation of concept testing.

2. Current wire maps be made of all areas that are to be used for training. Dissemination

OH-58 pilot flew too low and helicopter struck wires, crashed, and burned.

and input of wire information should be spelled out in SOP's. Individuals should be responsible for carrying currently posted wire maps.

3. Preflight briefings should be comprehensive and include weather, wire location, and heights of any known obstruction to flight.

4. Command emphasis be placed on procurement of Nomex fire retardant flight suits and gloves.

5. All wires in major training areas be marked with reflective devices.

6. The fuel cell of the OH-58 be redesigned or included in the Army aircraft program of construction of self-sealing, high impact strength fuel cells.

7. A high reconnaissance of areas be conducted prior to initiation of any low level flights through the area.

Tables 4 and 5 show the types of wires which were struck during this period and their respective locations--on or off airfields. Of the different type wires listed, 71 were classified as high tension powerlines. Usually, high tension lines consist of several strands of wire per bundle. The strength of these wires is such that when struck, the pilot loses complete control of the aircraft and a major accident usually results. Fatalities are common in these types of mishaps.

For the purpose of this report, an airfield is defined as an established airfield, permanent or temporary stagefield, or a field strip from which organized operations are conducted. Off airfield includes dirt roads, unprepared fields, and confined areas. Approximately 64% of the wire strikes occurred off an established airfield. Twenty-seven percent occurred on established airfields. This indicates that a significant factor in reducing wire strike accidents would be to locate and mark all wires off of military installations where low level navigation or contour flight training is conducted.

Vietnam reported 42 wire encounters, 23 of which were classified as major accidents. Ninety percent of the 23 occurred off an airfield. Of the total strikes in Vietnam, 21 were high tension powerlines, six involved telephone wires, two were field wires, and 13 were unidentified. As previously stated, 13 wire strikes occurred in the same general location, involving the same set of powerlines, in the III Corps Tactical Zone. Vietnam also accounted for 53% of the total fatalities reported during this 4½-year period.

The phase of flight, period of day, and altitude at which wire strikes were found to most commonly occur are shown in tables 6, 7, and 8. For example, the phase-of-flight table shows that the majority of all wire strikes occurred

TABLE 4

Types Of Wires

AIRCRAFT CATEGORY	TELEPHONE	FIELD	POWER	UNK
R/W	12	19	64	34
F/W		1	7	9
TOTAL	12	20	71	43

TABLE 5

Location Of Wires

CY	ON AIRFIELD	OFF AIRFIELD	UNKNOWN
1966	11	8	9
1967	10	21	3
1968	8	22	3
1969	9	27	2
1970*	1	12	
TOTAL	39	90	17

*First half of CY 1970

TABLE 6

Phase Of Flight

YEAR	TAKEOFF	LANDING	LEVEL
1966	7	10	11
1967	4	14	16
1968	8	5	20
1969	12	10	16
1970*	4	3	6
TOTAL	35	42	69
PERCENT	24%	29%	47%

*First half of CY 1970

during straight and level maneuvers. This phase of flight alone accounted for 48% of the total mishaps. During level flight, an aviator may frequently fly less than 50 feet above the ground to take advantage of terrain features to conceal his aircraft from the enemy. In fact, the table showing altitude above ground verifies this statement in that over one-half (59%) of all wires struck were between the altitude of 0-50 feet above ground level.

It is interesting to note that the number of wire strikes during takeoff is almost as great as that for landing. One would think that prior to takeoff, the aviator would have familiarized himself with any obstructions in and around the vicinity. Also, during takeoff, wires should generally have a light (sky) background, making them more visible than during landing when they tend to blend with the surroundings.

TABLE 7

Altitude Above Terrain

TYPE AIRCRAFT	0'-50'	51'-100'	101'-ABOVE	UNKNOWN
UH-1	38	6	8	7
OH-23	15	2	3	4
TH-55	10	2		2
OH-6	9	1	1	2
OH-13	6	1	1	1
CH-21	2	2		2
OH-58			1	
CH-37		1		
AH-1G		1		
CH-47	1			
O-1	2	1	1	6
U-6	1			2
U-1	1			1
T-41			1	1
TOTALS	85	17	16	28
PERCENT	59%	12%	11%	18%

TABLE 8

Period Of Day

AIRCRAFT	DAWN	DAYLIGHT	DUSK	NIGHT
R/W	4	104	4	17
F/W		15	1	1
TOTALS	4	119	5	18

Poor planning, judgment, and technique on the part of flight crews are documented in many of the accident reports reviewed for this report. It is believed that had a thorough ground reconnaissance been accomplished prior to takeoff, most of these wire strikes could have been prevented.

The period-of-day table shows that approximately 82% (119) mishaps occurred during daylight hours. The majority of these occurred during VFR conditions.

Although restricted visibility is not a significant factor in the overall wire strike problem, this report did reveal cases in which visibility was involved. For example, a TH-55A crashed when the instructor pilot and student were on a cross-country navigation training flight. The instructor pilot was one of two controlling other cross-country aircraft. Shortly after takeoff from the second landing point, the IP transmitted that he was penetrating a squall line. Approximately 1 hour later, the TH-55 struck two high voltage powerlines, resulting in total loss of the helicopter and two fatalities. The cause of this accident was established as operator error, caused by flying in weather that was less than prescribed VFR minimums at an altitude less than 500 feet above ground level which was in *violation of written directives.*

The probable or suspected cause was listed as supervision due to failure to adequately analyze the forecast weather and the primary controller allowing the TH-55A and his own helicopter to be flown in weather conditions which were less than prescribed VFR minimums. It was recommended that:

1. Current directives concerning minimum flight altitudes be reviewed with all personnel, with emphasis being placed on strict compliance with all directives.

2. Current directives concerning how to conduct missions in marginal weather conditions be reviewed with all personnel.

3. All personnel receive instruction in the interpretation of current weather forecast terminology.

4. The importance of closely monitoring

TABLE 9

Occupant Injury Experience

TYPE AIRCRAFT	NUMBER OF OCCUPANTS INVOLVED	INJURED	FATAL
UH-1	186	28	54
OH-23	40	9	2
OH-6A	21	5	6
TH-55	22	5	5
OH-13	12	4	
CH-21	9		
OH-58	2		2
CH-37	4		
AH-1G	1		
CH-47	1		
O-1	14	2	3
U-6	4		
U-1	7	3	3
T-41	2		
TOTALS	325	56	75

weather breifings be emphasized to all flight personnel.

One of the most alarming facts revealed by this report is best illustrated in table 9. Of the 325 occupants involved in wire strike accidents, approximately 41% received fatal or lost-time injuries. Eighty-two of the 131 injuries and fatalities occurred in helicopters. Twenty-six major UH-1 accidents resulted in 54 fatalities. Forty occurred in Vietnam as a result of striking high tension powerlines.

This report also revealed that approximately 90% of all major injuries resulted from pilots losing control of the aircraft after striking wires.

A significant factor is the nonsurvivable aspect of postcrash fires. There were eight fatalities reported as a result of 14 postcrash fires.

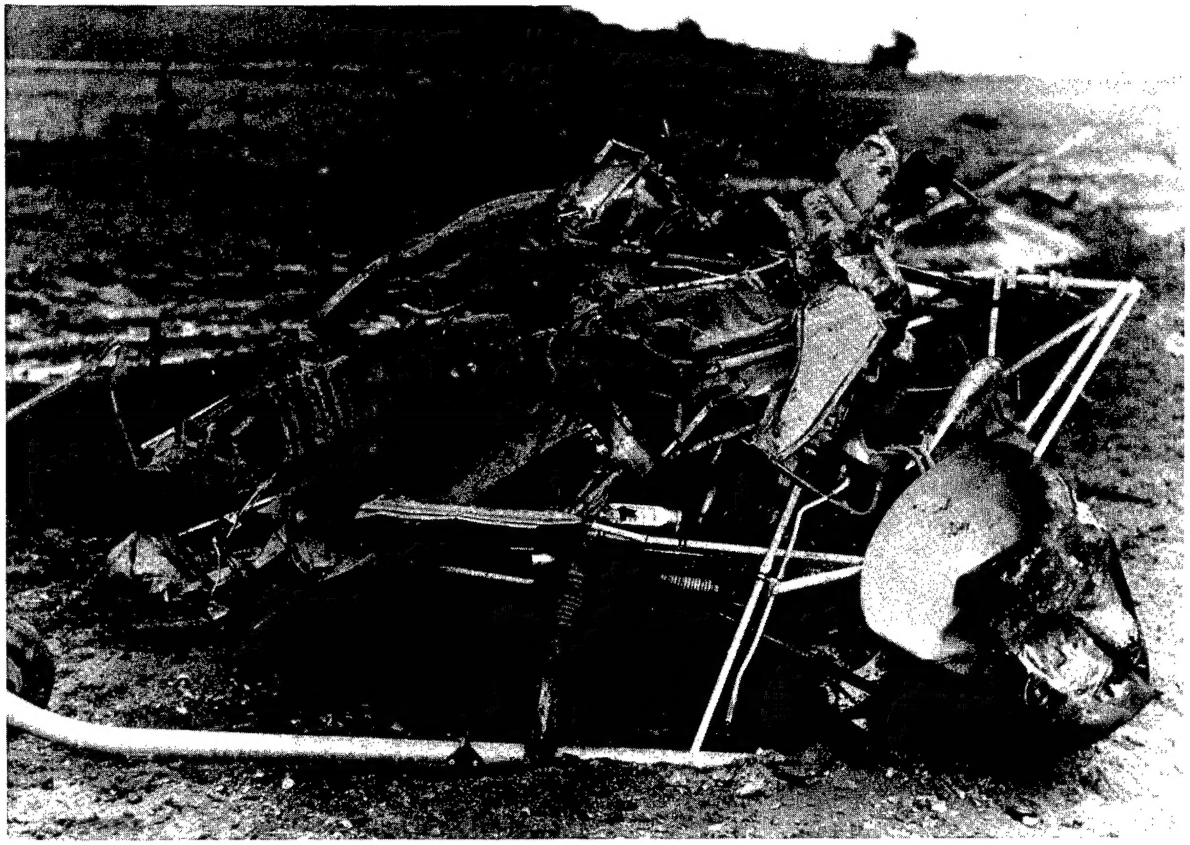
The dollar cost of damage to aircraft involved in wire strike mishaps during this reporting period is shown in table 10. The total damage to both fixed and rotary wing aircraft exceeded $6½ million.

Of the 146 mishaps reported, the UH-1 accounted for 59. These 59 mishaps resulted in a $5 million loss or approximately 76% of the total cost involved for all aircraft wire strikes. This high cost is due to the great number of UH-1's,

TABLE 10

Dollar Costs

TYPE AIRCRAFT	COST
UH-1	$5,097,125
OH-23	465,474
OH-6	286,182
TH-55	197,897
OH-13	147,473
OH-58	99,302
CH-47	16,927
CH-37	11,000
AH-1G	2,383
TOTAL	$6,323,763
U-1	$124,709
U-6	100,414
O-1	83,640
T-41	257
TOTAL	$309,020



IP violated written directives by flying too low and TH-55A struck high voltage powerlines and crashed.

their mission requirements, and high flying hours.

In CY 1966 wire strike accidents and incidents cost the Army more than $½ million. At the close of CY 1969, this figure had increased to more than $2 million. Although wire strike mishap rates have remained fairly constant throughout this reporting period, the rise in cost of our new sophisticated helicopters is considered responsible for the increased cost of these mishaps. This increased trend in dollar loss will be even greater during the next few years unless positive command action is taken to prevent mishaps of this type.

REFERENCES

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